

# Professional Master's Degree University Teaching





## Professional Master's Degree University Teaching

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/education/professional-master-degree/master-university-teaching](http://www.techtitute.com/us/education/professional-master-degree/master-university-teaching)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Course Management

---

*p. 18*

05

Structure and Content

---

*p. 24*

06

Methodology

---

*p. 42*

07

Certificate

---

*p. 50*

# 01

# Introduction

University teaching is a challenge for any professional. Teaching young adults requires intensive, comprehensive and multidisciplinary knowledge that covers every aspect of current practice in education, since students expect excellence from their professors and have grown up in a digital environment where they can acquire new knowledge almost instantaneously. That is precisely the challenge this program intends to turn into an achievable goal for all our students, through an intensive and efficient process of competence acquisition, supported by the best educational resources and a highly qualified teaching staff.





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*Acquire the ability to become a competent and updated university professor that can face the task of teaching a demanding student body with total confidence and assurance”*

The main objective of this Professional Master's Degree in University Teaching is to encourage and strengthen the skills and abilities of professors in higher education, taking into account the most current teaching tools in this area. Professors will complete the program being able to provide their students with the necessary motivation to continue their studies and develop an appeal for scientific research.

This Professional Master's Degree will allow the teacher to review the fundamental knowledge in the field of teaching and to know the best way to guide and orient students in their day-to-day work.

The program stands out because it benefits from a structured distribution based on theoretical AI, guided practical examples in every module and motivational, explanatory videos. This will allow our students to easily and clearly study teaching in higher education, with special emphasis on motivating further research.

They will be instructed in active teaching methodologies and techniques, quality educational models and assessment plans, programming and implementation phases in educational projects, and current tools and resources used in university teaching.

This includes knowledge of the competencies professors must acquire to offer proper training to their students, and to adequately direct theses and scientific research papers while putting into practice the most accurate innovation tools in each case.

This **Professional Master's Degree in University Teaching** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ Practical cases presented by experts in university teaching
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ The latest development in university teaching
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ A special emphasis on innovative methodologies in university teaching
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an internet connection



*A high-level program that you can apply to directing theses and scientific research projects, with the support of the most interesting innovations in the field"*

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*Structured on the basis of efficiency, this program will allow you to quickly acquire your training while balancing it with other responsibilities”*

The teaching staff includes higher education professionals who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. To that end, our students will be supported by an innovative, interactive video system created by renowned and extensively experienced experts in university teaching.

*Comprehensive, high-quality virtual support is offered as part of this Professional Master's Degree.*

*A quality program designed to create the best professors, available for you in a unique growth opportunity.*



# 02

# Objectives

The Professional Master's Degree in University Teaching aims to help students acquire all the knowledge needed to be a successful professor in different specialties in higher education. A journey that will provide education professionals with greater and improved performance capacity via the latest advances and newest treatments in the field.







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*Acquire the theoretical and practical knowledge required to boost your teaching skills towards a higher level of excellence”*



## General objectives

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- ◆ Encourage skills and competences in university professors
- ◆ Understand the most up-to-date tools to work as a professor in higher education
- ◆ Learn how to motivate students to take interest in continuing their studies and pursuing academic/scientific research
- ◆ Update on the changes taking place in higher education

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*You will learn from highly qualified experts, who will provide you with their real professional experience, granting the program a realistic and immediate perspective of the profession”*





## Specific objectives

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### Module 1. Active Methodologies and Didactic Techniques

- ♦ Learn to achieve self-motivation in students
- ♦ Understand the methodology adapted to professors and their needs
- ♦ Know how to choose the methodology best suited to the context in which the teaching process takes place
- ♦ Learn about the most innovative strategies and tools that use a variety of resources

### Module 2. Higher Education

- ♦ Understand the principles and objectives that led to the emergence of higher education institutions worldwide
- ♦ Learn to reflect on new pedagogical, technological and social needs that universities must meet

### Module 3. Quality Models and Quality Assessment in Education

- ♦ Learn to improve your knowledge of the internal operations of the institution, and teaching and learning processes
- ♦ Learn to collect information on whether they are achieving their learning objectives or not
- ♦ Know how to introduce measures for improvement in enough time to prevent student underachievement and school failure

### Module 4. Programming and Implementing Educational Projects

- ♦ Acquire the skills needed in a specific field of knowledge
- ♦ Conduct a detailed study of the educational project followed by the school
- ♦ Know the different types of the most important educational projects that are being developed both nationally and internationally
- ♦ Learn the most important aspects to take into account in the programming and implementing of educational projects

### Module 5. Teaching and Learning Tools and Resources

- ♦ Learn to select those strategies, resources and tools that have been applied in education
- ♦ Know how to present and incorporate new methodologies, resources and techniques which allow the teacher to anticipate new challenges
- ♦ Work on the teaching of tomorrow so that it can integrate educational change will inevitably go hand in hand with new social and technological developments.
- ♦ Prepare students for a changing and more uncertain environment
- ♦ Learn to incorporate activities such as the use and enjoyment of new technologies and social networks, gamification in teaching, as well as online educational platforms

### Module 6. Introduction to Teaching Skills

- ♦ Learn how to make a broad, objective and experience-based description of the skills that every teacher must develop and strengthen before and during their work in the classroom
- ♦ Know how to analyze all the educational professors are involved in, including the skills all practicing professors should possess
- ♦ Identify different tools and strategies to analyze and assess the teaching profession as a means to improve and perfect it

### Module 7. Competency-Based Learning in Higher Education

- ♦ Know how to direct students' efforts towards new approaches to education
- ♦ Pursue competency-based learning, where knowledge is combined with its application in practical, diverse, changing and realistic situations
- ♦ Incorporate skill-based professional performance

### Module 8. Thesis Direction, Scientific Research, and Guidance in Higher Education

- ♦ Know how to direct and guide students interested in scientific research
- ♦ Acquire the resources to conduct effective, enjoyable and motivating work
- ♦ Discover the importance of motivation and orientation of students interested in investigation
- ♦ Acquire the knowledge and practical tools to carry out research guidance with complete confidence





### **Module 9. Educational Research Methodology**

- ♦ Know how to develop attitudes and skills for scientific research as an essential requirement to contribute to the progress and welfare of society

### **Module 10. Innovation, Diversity and Equity in Education**

- ♦ Focus your knowledge on innovation, diversity and equity in education
- ♦ Provide all the necessary material to study through a series of activities for reflection, research and inquiry
- ♦ Learn to implement innovative educational plans in your respective centers and classrooms

# 03 Skills

After passing the assessments for this Professional Master's Degree in University Teaching, our students will have acquired the skills required to provide quality and up-to-date practice based on the most innovative teaching methodology.



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*This program will allow you to learn the new tools used in university teaching to offer better service to your students”*



## General skills

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- Apply the most appropriate educational practices to university teaching
- Learn to motivate students to develop their research skills
- Implement educational changes in daily practice with university students

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*This program will allow you to learn in a theoretical and practical way, through virtual learning systems, to develop your work with total guarantees of success”*







## Specific skills

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- ♦ Apply the methodologies that best suit each lesson and the educational context
- ♦ Develop strategies and apply the most precise tools in daily practice
- ♦ Know the principles and objectives that led to the creation of higher education to include them in teaching processes
- ♦ Reflect on new pedagogical, technological and social needs universities must meet to provide the best education to students
- ♦ Improve teaching processes in universities
- ♦ Obtain the necessary information to determine whether the objectives proposed for the learning process are being met
- ♦ Introduce measures for improvement in enough time to prevent student underachievement and school failure
- ♦ Recognize various current educational projects in higher education to implement the most suitable one
- ♦ Program and implement educational processes
- ♦ Develop the best strategies for developing educational practice in universities
- ♦ Incorporate the main methodologies to anticipate new educational challenges
- ♦ Learn to prepare students to manage in a changing environment
- ♦ Introduce activities that implement the use of new technologies within teaching
- ♦ Develop the necessary skills to approach university teaching
- ♦ Utilize teaching analysis and assessment strategies to improve the profession as a whole
- ♦ Combine theoretical teaching with practical activities to achieve competency-based learning for students
- ♦ Learn to motivate and guide students toward research
- ♦ Guide students in any doubts they may have during their university education
- ♦ Develop the necessary skills for scientific research, which will contribute towards the progress and well-being of society
- ♦ Provide all the necessary material to implement educational projects based on reflection and research
- ♦ Put into practice innovative educational plans

04

# Course Management

The program's teaching staff includes leading experts in university teaching who contribute their vast work experience to this program. Additionally, other recognized experts participate in its design and preparation, completing the program in an interdisciplinary manner.





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*Learn about the latest advances  
in University Teaching from the  
leading experts in AI”*

## Management



### Ms. Jiménez Romero, Yolanda

- ◆ Psychopedagogue and Primary School Teacher with a major in English
- ◆ Director of the University Teaching and Educational Coaching programs at TECH Global University
- ◆ Co-director of the programs in Language Didactics in Infant and Primary School, Language and Literature Didactics in Secondary and High School, Bilingual Didactics in Secondary and High School and Bilingual Didactics in Infant and Primary School at TECH Global University
- ◆ Co-director and Professor of the Neurosciences Program at TECH Global University
- ◆ Co-director of the programs in Emotional Intelligence and Vocational and Professional Guidance at TECH Global University
- ◆ Lecturer of the Visual Skills and Academic Achievement program at TECH Global University
- ◆ Teacher in the High Abilities and Inclusive Education program
- ◆ Educational psychologist
- ◆ Master's Degree in Neuropsychology of High Abilities
- ◆ Master's Degree in Emotional Intelligence
- ◆ Neurolinguistic Programming Practitioner

## Professors

### Ms. Álvarez Medina, Nazaret

- ♦ Degree in Psychopedagogy, Open University of Catalonia
- ♦ Graduate in Primary Education with Mention in English Language, Camilo José Cela University
- ♦ Official Professional Master's Degree on Educational Treatment of Diversity
- ♦ Diploma in Teaching English as a Foreign Language, University of La Laguna, Spain
- ♦ Degree in Educational and Executive Coaching from the Complutense University of Madrid
- ♦ Educational counselor, official in the body of secondary education teachers in the community of Madrid
- ♦ Preparer of public education competitive examinations

### Dr. Gutiérrez Barroso, César

- ♦ PhD Candidate in History at National Distance Education University (UNED), November 2018
- ♦ Degree in History (Castilla La Mancha University) , 2001-2006
- ♦ Master's Degree in Multiple Intelligences for Secondary School (Alcalá de Henares University)
- ♦ Master's Degree in Museology, Center for Study Techniques (Madrid), 2007
- ♦ Middle School and High School Teacher at Liceo San Pablo School in Leganés  
Geography and History Teacher of 6th and 8th Grade and Senior year of High School (9/11/2018-11/09/2019)

**Manzano García, Laureano**

- ♦ Degree in Psychology from Autonomous University of Madrid, 1996
- ♦ Degree in Special Education from ESCUNI Madrid 2002
- ♦ Competitive examinations tutor in face-to-face and online classes, as well as distance tutoring for the specialist subjects of Special Education (teachers) and Educational Guidance (high school) Since 2002
- ♦ Teacher at IES Victoria Kent Since 2012

**Dr. Pattier Bocos, Daniel**

- ♦ PhD in Education, Complutense University of Madrid. 2017- present
- ♦ Degree in Primary Education - Complutense University of Madrid, 2010-2014
- ♦ Master's Degree in Research and Innovation in Education UNED. 2014-2016
- ♦ University Professor in Didactics and Curricular Innovation (bilingual in English) Complutense University of Madrid
- ♦ Creator of university materials and contents, UNIR, CEU University, Cardenal Herrera
- ♦ FPU Research Fellow in Education - Complutense University of Madrid
- ♦ Finalist for the Best Teacher Prize in Spain, 2018

**Fernández Cebrián, José María**

- ♦ Degree in Teaching, Complutense University of Madrid (2017 -2010)
- ♦ Master's Degree in Education Center Management Antonio de Nebrija University (2012)
- ♦ Master's Degree in Secondary Teacher Training, CEU Cardenal Herrera, 2018 -2019
- ♦ Online Trainer in Education Center Management, CIESE-Comillas Foundation, June 2019 to present





**Dr. Valero Moreno, Juan José**

- ♦ Agricultural Engineer Higher Technical School of Agricultural Engineering , University of Castilla-La Mancha , Albacete, 2000
- ♦ Master's Degree in Management of Occupational Risk Prevention, Excellence, Environment and Corporate Responsibility, ESEA - UCJC, 2014. Seville
- ♦ Master's Degree in Innovation and Research in Education Specialty: Quality and Equity in Education (100 ETCS) UNED. Madrid, 2014
- ♦ Master's Degree in Occupational Risk Prevention, UNIR, 2011

**Visconti Ibarra, Martin Edgardo**

- ♦ PhD in Education and Behavioral Sciences, Vigo University, since 2015
- ♦ Degree in Primary Education, Pontevedra School of Education and Sports Sciences (2009-2014)
- ♦ Master's Degree in Learning Difficulties and Cognitive Processes, CCSS Faculty of Education and History at Ourense (2014-2015)
- ♦ Master's Degree in Management of Educational Centers, CEU Cardenal Herrera (since May 2019)
- ♦ Director of the European Bilingual Academy School (El Salvador) Since 2018.

# 05

# Structure and Content

The content has been designed and structured by the best professionals in university teaching, who have extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and who also have extensive knowledge of new technologies applied to teaching.







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*This Professional Master's Degree in University Teaching contains the most complete and up-to-date program on the market”*

## Module 1. Active Methodologies and Didactic Techniques

- 1.1. Active Methodologies
  - 1.1.1. What Are Active Methodologies?
  - 1.1.2. Keys for Methodological Development from the Students Activity
  - 1.1.3. Learning and Active Methodologies
  - 1.1.4. History of Active Methodologies
    - 1.1.4.1. From Socrates to Pestalozzi
    - 1.1.4.2. Dewey
    - 1.1.4.3. Institutions Promoting Active Methodologies
      - 1.1.4.3.1. Free Educational Institutions
      - 1.1.4.3.2. The New School
      - 1.1.4.3.3. The Unique Republican School
- 1.2. Project-Based Learning, Problems and Challenges
  - 1.2.1. Travel Companions: Cooperation between Professors
  - 1.2.2. Phases of PBL Design
    - 1.2.2.1. Tasks, Activities and Exercises
    - 1.2.2.2. Rich Socialization
    - 1.2.2.3. Research Tasks
  - 1.2.3. Phases of PBL Development
    - 1.2.3.1. Benjamin Bloom's Theories
    - 1.2.3.2. Bloom's Taxonomy
    - 1.2.3.3. Bloom's Taxonomy revised
    - 1.2.3.4. Bloom's Pyramid
    - 1.2.3.5. David A. Kolb's Theory: Experience-Based Learning
    - 1.2.3.6. Kolb's Cycle
  - 1.2.4. Final Product
    - 1.2.4.1. Types of Final Product
  - 1.2.5. Assessment in PBL
    - 1.2.5.1. Assessment Techniques and Tools
      - 1.2.5.1.1. Observation
      - 1.2.5.1.2. Performance
      - 1.2.5.1.3. Questions
  - 1.2.6. Practical Examples: PBL Projects
- 1.3. Thought-Based Learning
  - 1.3.1. Basic Principles
    - 1.3.1.1. Why, How and Where to Improve Thought?
    - 1.3.1.2. Thought Organizers
    - 1.3.1.3. Infusion with the Academic Curriculum
    - 1.3.1.4. Attention to Skills, Processes and Disposition
    - 1.3.1.5. The Importance of Being Explicit
    - 1.3.1.6. Attention to Metacognition
    - 1.3.1.7. Learning Transfer
    - 1.3.1.8. Construct an Infused Program
    - 1.3.1.9. The Need for Continuous Personal Development
  - 1.3.2. Teaching to Think Thought-Based Learning (TBL)
    - 1.3.2.1. Creating Mind Maps Collaboratively
    - 1.3.2.2. Thinking Skills
    - 1.3.2.3. Metacognition
    - 1.3.2.4. Thought Design
- 1.4. Event-Based Learning
  - 1.4.1. Approach to the Concept
  - 1.4.2. Basis and Foundations
  - 1.4.3. The Pedagogy of Sustainability
  - 1.4.4. Benefits of Learning
- 1.5. Game-Based Learning
  - 1.5.1. Games as Learning Resources
  - 1.5.2. Gamification
    - 1.5.2.1. What Is Gamification?
      - 1.5.2.1.1. Fundamentals
      - 1.5.2.1.2. Narration
      - 1.5.2.1.3. Dynamics
      - 1.5.2.1.4. Mechanisms
      - 1.5.2.1.5. Components
      - 1.5.2.1.6. Insignias
      - 1.5.2.1.7. Gamification Apps
      - 1.5.2.1.8. Examples
      - 1.5.2.1.9. Gamification: Critics, Limitations and Common Mistakes



- 1.5.3. Why Use Videogames in Education?
- 1.5.4. Types of Players According to the Richard Bartle Theory
- 1.5.5. Escape Room/Breakout Edu: An Organizational Way to Understand Education
- 1.6. Flipped Classroom
  - 1.6.1. Organizing Working Hours
  - 1.6.2. Advantages of the Flipped Classroom
    - 1.6.2.1. How to Effectively Use Flipped Classrooms?
  - 1.6.3. Disadvantages of the Flipped Classroom Approach
  - 1.6.4. The Four Pillars of the Flipped Classroom
  - 1.6.5. Resources and Tools
  - 1.6.6. Practical Examples
- 1.7. Other Trends in Education
  - 1.7.1. Robotics and Programming in Education
  - 1.7.2. e-Learning, Micro-Learning and Other Online Trends
  - 1.7.3. Neuroeducation-Based Learning
- 1.8. Free, Natural Methodologies based on Individual Development
  - 1.8.1. Waldorf Methodology
    - 1.8.1.1. Methodological Basis
    - 1.8.1.2. Strengths, Opportunities and Weaknesses
  - 1.8.2. Maria Montessori, the Pedagogy of Responsibility
    - 1.8.2.1. Methodological Basis
    - 1.8.2.2. Strengths, Opportunities and Weaknesses
  - 1.8.3. Summerhill, a Radical Point of View on How to Teach
    - 1.8.3.1. Methodological Basis
    - 1.8.3.2. Strengths, Opportunities and Weaknesses
- 1.9. Educational Inclusion
  - 1.9.1. Can There Be Innovation without Inclusion?
  - 1.9.2. Cooperative Learning
    - 1.9.2.1. Principles
    - 1.9.2.2. Group Cohesion
    - 1.9.2.3. Simple and Complex Dynamics
  - 1.9.3. Shared Teaching

- 1.9.3.1. Ratio and Attention to Students
- 1.9.3.2. Teaching Coordination as a Strategy for Student Improvement
- 1.9.4. Multilevel Teaching
  - 1.9.4.1. Definition
  - 1.9.4.2. Models
- 1.9.5. Universal Learning Design
  - 1.9.5.1. Principles
  - 1.9.5.2. Guidelines
- 1.9.6. Inclusive Experiences
  - 1.9.6.1. Rome Project
  - 1.9.6.2. Interactive Groups
  - 1.9.6.3. Dialogical Gatherings
  - 1.9.6.4. Learning Communities
  - 1.9.6.5. INCLUD-ED Project

## Module 2. Higher Education

- 2.1. Historical Summary of the Development of Universities
  - 2.1.1. The First Universities
  - 2.1.2. University of Salamanca
  - 2.1.3. Universities in Mexico and Latin America
  - 2.1.4. European Universities
  - 2.1.5. North American Universities
  - 2.1.6. Cardinal Newman
  - 2.1.7. The Cultural and Educational Contribution of the Middle Ages
  - 2.1.8. Knowledge of the Cloisters: Cathedral and Monastic Schools
  - 2.1.9. Universities in the 20th Century
  - 2.1.10. Adopting the Notion of Networking in the Academic Field
- 2.2. The Concept of University

- 2.2.1. What Is Done at University?
- 2.2.2. Knowledge
- 2.2.3. What Is Taught and How Is It Taught?
- 2.2.4. Research and Support Services
- 2.2.5. The Critical Role Played by Universities
- 2.2.6. The Intellectual Role Played by Universities
- 2.2.7. Autonomous Universities
- 2.2.8. Academic Freedom
- 2.2.9. University Communities
- 2.2.10. Assessment Processes
- 2.3. Higher Education Spaces Worldwide
  - 2.3.1. Globalization: Towards a Change in Higher Education
  - 2.3.2. Social Changes and Higher Education Spaces
  - 2.3.3. GUNI Networks
  - 2.3.4. Higher Education in Europe
  - 2.3.5. Higher Education in Latin America
  - 2.3.6. Higher Education in Africa
  - 2.3.7. Higher Education in Asia and the Pacific
  - 2.3.8. Tempus Project
- 2.4. The Bologna Process: European Higher Education Area (EHEA)
  - 2.4.1. The Origin of the EHEA
  - 2.4.2. The Sorbonne Declaration
  - 2.4.3. The Salamanca Convention and the Bologna Process
  - 2.4.4. Implementing Tuning Educational Projects in Europe
  - 2.4.5. Redefining the Syllabus
  - 2.4.6. New Credit Transfer and Accumulation System
  - 2.4.7. The Concept of Competence
  - 2.4.8. Student Exchange and Mobility
  - 2.4.9. EHEA within the Process of Globalizing Higher Education
  - 2.4.10. Experiences and Research in EHEA

- 2.5. Ibero-American Knowledge Area
  - 2.5.1. Ibero-American University Cooperation in Higher Education
  - 2.5.2. Launching the Ibero-American Higher Education Area
  - 2.5.3. Opportunities, Initiatives and Detected Obstacles
  - 2.5.4. Institutions and Entities Involved
  - 2.5.5. Implementing Tuning Educational Projects in Ibero-America
  - 2.5.6. Ibero-American Initiative for Social Communication and Scientific Culture
  - 2.5.7. Science and Technology for Development (CYTED) Program
  - 2.5.8. Pablo Neruda Mobility Program
  - 2.5.9. Ibero-American Program for Industrial Property and Promotion of Development (IBEPI)
  - 2.5.10. Euro-American Cooperation in Higher Education
- 2.6. Education Models in Higher Education
  - 2.6.1. The Concept of Education Models
  - 2.6.2. Influence of Education Models on University Academic Models
  - 2.6.3. Coherence of Education Models with the Vision and Mission of Universities
  - 2.6.4. The Pedagogical Foundation of Education Models
  - 2.6.5. Educational Psychology Theories that Support Education Models
  - 2.6.6. Ken Robinson Education Model
  - 2.6.7. John Taylor Gatto Education Model
  - 2.6.8. Towards a New Integral Model
  - 2.6.9. The Education Model Based on Skills
  - 2.6.10. The Internet in the Pedagogical Paradigm of Higher Education
- 2.7. University Organization
  - 2.7.1. The Structure of a University as an Organization
  - 2.7.2. Coordination of Work in an Organization
  - 2.7.3. Constituent Parts of an Organization
  - 2.7.4. Core Members of a University
  - 2.7.5. Fields of Action in the University Organization
  - 2.7.6. The Role Played by University Professors
  - 2.7.7. Competence Building: The Object of University Teaching
  - 2.7.8. The Transmission of Knowledge
  - 2.7.9. University Organization, Governance and Leadership
  - 2.7.10. University Management
- 2.8. The Virtual Campus in Higher Education
  - 2.8.1. e-Learning Scenarios and Elements
  - 2.8.2. e-Learning Platforms
  - 2.8.3. b-Learning
  - 2.8.4. Mentoring
  - 2.8.5. Blended Learning
  - 2.8.6. Flipped Classrooms
  - 2.8.7. Mastery Learning
  - 2.8.8. TPACK Model
  - 2.8.9. MOOCs
  - 2.8.10. Mobile Learning
- 2.9. Scientific Dissemination and Popularization on the Internet
  - 2.9.1. How to Diffuse Scientific Information on the Internet?
  - 2.9.2. Scientific Dissemination in Academic Environments
  - 2.9.3. Dissemination vs. Disclosure
  - 2.9.4. Visibility and Accessibility of Scientific Papers
  - 2.9.5. Tools to Increase Visibility
  - 2.9.6. Open Access
  - 2.9.7. Public Profile of Research Personnel
  - 2.9.8. General Social Networks and Application in Scientific Dissemination
  - 2.9.9. Scientific Social Networks
  - 2.9.10. Blog Dissemination
- 2.10. Self-Managing Academic Writing
  - 2.10.1. Epistemic and Pedagogical Function of Writing
  - 2.10.2. Academic and Communicative Function of Writing
  - 2.10.3. Cognitive Focus of Learning
  - 2.10.4. The Technique of Writing a Text
  - 2.10.5. Organizing an Argument
  - 2.10.6. Coherence and Cohesion Mechanisms in Texts
  - 2.10.7. Academic Papers
  - 2.10.8. Research Articles

### Module 3. Quality Models and Quality Assessment in Education

- 3.1. Nature and Evolution of the Concept of Quality
  - 3.1.1. Conceptual Introduction
  - 3.1.2. Dimensions of the Concept of Quality
  - 3.1.3. Evolution of the Concept of Quality
    - 3.1.3.1. Initial Stages
    - 3.1.3.2. Industrial Revolution
    - 3.1.3.3. Movement for Quality
  - 3.1.4. Basic Principles of Quality
  - 3.1.5. Total Quality and Excellence
  - 3.1.6. Concept of Quality Management
  - 3.1.7. Focus of Quality Management: Classification and Basic Characteristics
- 3.2. Quality in Education: Dimensions and Components
  - 3.2.1. Analysis of the Term Quality in Education
  - 3.2.2. Quality Assessment
  - 3.2.3. Dimensions and Components of a Quality Plan in Education
    - 3.2.3.1. Context
    - 3.2.3.2. Educational Concept
    - 3.2.3.3. Methods
    - 3.2.3.4. Results
  - 3.2.4. Quality Models Used to Appraise Organizations
    - 3.2.4.1. The Malcolm Baldrige Model
    - 3.2.4.2. The Excellence Model of the European Foundation for Quality Management
    - 3.2.4.3. The Ibero-American Model for Excellence Management
    - 3.2.4.4. Comparison between Excellence Models and ISO 9000 Criteria
    - 3.2.4.5. Systemic Nature of the Principles and Practices of Total Quality Management (TQM)
  - 3.2.5. TQM Process: Adoption Grade



- 3.3. Design and Development of Educational Processes
  - 3.3.1. Educational Nature of the Objectives
  - 3.3.2. Validation and Process Changes
  - 3.3.3. Processes Where Stakeholders Are Involved
  - 3.3.4. Management Responsibility
  - 3.3.5. Promoting Participation
  - 3.3.6. Systemic Assessment as a Base for Continued Improvement
- 3.4. Measurement, Analysis and Improvement
  - 3.4.1. General Guidelines
  - 3.4.2. Monitoring and Measurement
    - 3.4.3. Data Analysis
    - 3.4.4. Continuing Improvement
    - 3.4.5. Classic Management and Quality Control Tools
      - 3.4.5.1. Data Collection Sheets
      - 3.4.5.2. Histogram
      - 3.4.5.3. Pareto Chart
      - 3.4.5.4. Fishbone / Ishikawa Diagram
      - 3.4.5.5. Correlation Diagram
      - 3.4.5.6. Control Charts
    - 3.4.6. New Management and Quality Control Tools
      - 3.4.6.1. Affinity Diagram
      - 3.4.6.2. Entity Relationship Diagram
      - 3.4.6.2. Tree Diagram
    - 3.4.7. Other Tools
      - 3.4.7.1. Modal and Failure Analysis
      - 3.4.7.2. Experiment Design
      - 3.4.7.3. Flow Chart
- 3.5. Quality Management Systems: ISO 9000 Standards
  - 3.5.1. Normative Standards in Quality Management
  - 3.5.2. ISO 9000 Standards
  - 3.5.3. Structure of Quality Management Systems according to ISO 9001 Standards
  - 3.5.4. The Process of Implementation and Certification of Quality Management Systems
    - 3.5.4.1. Management Decisions and Commitment
    - 3.5.4.2. Planning and Organizing Projects
    - 3.5.4.3. Preliminary Self-Diagnosis
    - 3.5.4.4. Information, Awareness and Training
    - 3.5.4.5. Preparing Documentation
    - 3.5.4.6. Implementation
    - 3.5.4.7. Monitoring and Improving Systems
    - 3.5.4.8. Key Factors in the Process
  - 3.5.5. Work Organization to Achieve Certification
  - 3.5.6. Certificate Retention and Periodic Audits
- 3.6. EFQM Excellence Model – European Model of Excellence and Quality
  - 3.6.1. The Model and the European Quality Award
  - 3.6.2. Fundamental Concepts
  - 3.6.3. Structure and Criteria
  - 3.6.4. Assessing Processes: RADAR Logic
  - 3.6.5. Framework and Benefits
- 3.7. Ibero-American Foundation for Quality Management (FUNDIBEQ) Model of Excellence
  - 3.7.1. The Model and the Ibero-American Award for Quality
  - 3.7.2. Fundamental Concepts
  - 3.7.3. Structure and Criteria
  - 3.7.4. Assessment Processes
  - 3.7.5. Framework and Benefits
- 3.8. Application of Quality Management Models to University Tutoring
  - 3.8.1. Contextualization of Quality Management Models in University Tutoring
  - 3.8.2. Added Value for Recipients
  - 3.8.3. Sustainable Guidance
  - 3.8.4. Organizational Skills
  - 3.8.5. Management Agility
  - 3.8.6. Creativity and Innovation
  - 3.8.7. Leadership with Vision and Integrity
  - 3.8.8. Achieve Success Through Human Talent
  - 3.8.9. Maintain Outstanding Results
  - 3.8.10. Process Based Focus

- 3.9. Assessing Teaching Staff in University Quality Improvement Plans
  - 3.9.1. Contextualization of the Evaluation of University Teaching Staff
  - 3.9.2. Student Assessment of Teaching Staff
  - 3.9.3. Integrating Teaching Staff Assessment into Improvement Plans
  - 3.9.4. Questionnaires to Assess University Teaching Staff
  - 3.9.5. Enquiries and Disseminating Results
- 3.10. Self-Assessment Plans and Improvement
  - 3.10.1. Contextualization and Previous Considerations
  - 3.10.2. Designing and Developing Improvement Plans
    - 3.10.2.1. Building Improvement Teams
    - 3.10.2.2. Choosing Areas for Improvement
    - 3.10.2.3. Outlining Objectives
    - 3.10.2.4. Analyzing Areas for Improvement
    - 3.10.2.5. Executing and Monitoring of Plans
    - 3.10.2.6. Conclusions and Suggestions
    - 3.10.2.7. Monitoring and Accountability
  - 3.10.3. Development and Analysis of the Areas
  - 3.10.4. Elaborating Improvement Plan
  - 3.10.5. Drafting Reports

#### Module 4. Programming and Implementing Educational Projects

- 4.1. Introduction to the Types of Educational Projects
  - 4.1.1. What Is an Educational Project?
  - 4.1.2. What Is the Purpose of an Educational Project?
  - 4.1.3. Origin of Educational Projects
  - 4.1.4. Parties Involved in Educational Projects
  - 4.1.5. Target Audience of Educational Projects
  - 4.1.6. Factors Involved in Educational Projects
  - 4.1.7. Content Included in Educational Projects
  - 4.1.8. Objectives of Educational Projects
  - 4.1.9. Results of Educational Projects
  - 4.1.10. Conclusion of Educational Projects

- 4.2. Technological Projects
  - 4.2.1. Virtual reality
  - 4.2.2. Augmented Reality
  - 4.2.3. Mixed Reality
  - 4.2.4. Digital Whiteboards
  - 4.2.5. iPad or Tablet Projects
  - 4.2.6. Mobile Devices in the Classroom
  - 4.2.7. Educational Robotics
  - 4.2.8. Artificial Intelligence
  - 4.2.9. e-Learning and Online Education
  - 4.2.10. 3D Printing
- 4.3. Methodological Projects
  - 4.3.1. Gamification
  - 4.3.2. Game-Based Education
  - 4.3.3. *Flipped Classrooms*
  - 4.3.4. Project-Based Learning
  - 4.3.5. Problem-Based Learning
  - 4.3.6. Thought-Based Learning
  - 4.3.7. Skill-Based Learning
  - 4.3.8. Cooperative Learning
  - 4.3.9. *Design Thinking*
  - 4.3.10. The Montessori Methodology
  - 4.3.11. Musical Pedagogy
  - 4.3.12. Educational Coaching
- 4.4. Value Projects
  - 4.4.1. Emotional Education
  - 4.4.2. Anti-Bullying Projects
  - 4.4.3. Projects to Support Associations
  - 4.4.4. Projects in Favor of Peace
  - 4.4.5. Projects in Favor of Stopping Discrimination



- 4.4.6. Solidarity Projects
- 4.4.7. Projects against Gender Violence
- 4.4.8. Inclusion Projects
- 4.4.9. Intercultural Projects
- 4.4.10. Coexistence Projects
- 4.5. Evidence-Based Projects
  - 4.5.1. Introduction to Evidence-Based Projects
  - 4.5.2. Previous Analysis
  - 4.5.3. Determining Objectives
  - 4.5.4. Scientific Research
  - 4.5.5. Choosing a Project
  - 4.5.6. Local or National Contextualization
  - 4.5.7. Viability study
  - 4.5.8. Implementing Evidence-Based Projects
  - 4.5.9. Monitoring Evidence-Based Projects
  - 4.5.10. Assessing Evidence-Based Projects
  - 4.5.11. Publishing Results
- 4.6. Artistic Projects
  - 4.6.1. LÓVA (Opera as a Learning Vehicle)
  - 4.6.2. Theater
  - 4.6.3. Musical Projects
  - 4.6.4. Choirs and Orchestras
  - 4.6.5. Infrastructure Projects
  - 4.6.6. Visual Arts Projects
  - 4.6.7. Plastic Arts Projects
  - 4.6.8. Decorative Arts Projects
  - 4.6.9. Street Projects
  - 4.6.10. Creativity-Based Projects
- 4.7. Language Projects
  - 4.7.1. On-Site Language Immersion Projects
  - 4.7.2. Local Language Immersion Projects
  - 4.7.3. International Language Immersion Projects
  - 4.7.4. Phonetic Projects
  - 4.7.5. Conversation Assistants
  - 4.7.6. Native Teachers
  - 4.7.7. Preparation for Official Language Exams
  - 4.7.8. Projects to Encourage Language Learning
  - 4.7.9. Exchange Projects
- 4.8. Excellence Projects
  - 4.8.1. Improving Personal Excellence
  - 4.8.2. Improving Institutional Excellence
  - 4.8.3. Improving Graduate Excellence
  - 4.8.4. Collaboration with Prestigious Entities
  - 4.8.5. Competitions and Prizes
  - 4.8.6. Projects for External Assessment
  - 4.8.7. Connection with Businesses
  - 4.8.8. Excellence Projects in Culture and Sport
  - 4.8.9. Advertising
- 4.9. Other Innovation Projects
  - 4.9.1. *Outdoor Education*
  - 4.9.2. Youtubers and Influencers
  - 4.9.3. *Mindfulness*
  - 4.9.4. Peer Tutoring
  - 4.9.5. RULER Method
  - 4.9.6. School Gardens
  - 4.9.7. Learning Communities
  - 4.9.8. Democratic Schools
  - 4.9.9. Early Stimulation
  - 4.9.10. Learning Corners

- 4.10. Programming and Implementation of Educational Projects
  - 4.10.1. Situational Analysis
  - 4.10.2. Objective
  - 4.10.3. SWOT Analysis
  - 4.10.4. Resources and Materials
  - 4.10.5. Programming Educational Projects
  - 4.10.6. Implementing Educational Projects
  - 4.10.7. Assessing Educational Projects
  - 4.10.8. Restructuring of an Educational Project
  - 4.10.9. Institutionalization of an Educational Project
  - 4.10.10. Dissemination of an Educational Project

## Module 5. Teaching and Learning Tools and Resources

- 5.1. The Teaching Process
  - 5.1.1. Definition of the Concept of Teaching
  - 5.1.2. Different Theories on the Concept of Teaching
  - 5.1.3. Modalities of Teaching
  - 5.1.4. Educational Levels throughout Development
- 5.2. The Learning Process
  - 5.2.1. Definition of the Concept of Learning
  - 5.2.2. Evolution of the Concept of Learning
  - 5.2.3. Different Theories on the Concept of Learning
  - 5.2.4. Learning in Different Educational Stages
- 5.3. The Teaching and Learning Process
  - 5.3.1. Learning and Teaching
  - 5.3.2. The Professor's Role
  - 5.3.3. The Student's Role
  - 5.3.4. Elements
  - 5.3.5. Reflection
- 5.4. Current Teaching and Learning Strategies
  - 5.4.1. Types of Teaching Strategies
  - 5.4.2. Types of Learning Strategies
  - 5.4.3. Inverted Teaching: *Flipped Classroom*
- 5.5. Inclusive Learning: Learning for Everyone
  - 5.5.1. Inclusive Education. UNESCO
  - 5.5.2. From Integration to Inclusion
  - 5.5.3. Designing Inclusive Learning Programs
  - 5.5.4. Functional Diversity and Learning
- 5.6. Guidance vs. Self-Study
  - 5.6.1. Academic Guidance
  - 5.6.2. Tutorial Action Plan
  - 5.6.3. Elements Involved in the Process
  - 5.6.4. Self-Learning and Decision-Making
- 5.7. Emotional Learning in the Digital Era
  - 5.7.1. Emotional Learning
  - 5.7.2. Stage Types and Methods in Emotional Learning
  - 5.7.3. The Digital Divide between Professors and Students
  - 5.7.4. Teaching in the Era of Digital Connectivity
- 5.8. Methodologies for future teaching
  - 5.8.1. Evolution of Teaching Methods
  - 5.8.2. Importance of Context
  - 5.8.3. Role of the Teacher in the Teaching of the Future
  - 5.8.4. Teaching with Tutorials: Learning Communities
  - 5.8.5. Classroom Organization: Flexible Timings and New Spaces
- 5.9. Teaching Resources and Tools
  - 5.9.1. Differences Between Didactic Resources and Tools
  - 5.9.2. Didactic Resources Types
  - 5.9.3. Choosing Resources and their Tools
  - 5.9.4. Design and Use of Conventional Resources
  - 5.9.5. Families as an Educational Resource



- 5.10. Training the Trainers
  - 5.10.1. Access to Teaching
  - 5.10.2. Continuous Training and Teacher Retraining
  - 5.10.3. Teacher Action Research
  - 5.10.4. Exchanging Projects, Methods and Teaching Materials
  - 5.10.5. Teaching Resource Banks

## Module 6. Introduction to Teaching Skills

- 6.1. Legal Regulations to Improve the Quality of Education
  - 6.1.1. Teacher Training Plans
  - 6.1.2. Quality Education Legislation
  - 6.1.3. Educational Environment Analysis
  - 6.1.4. Pedagogical Assessment
  - 6.1.5. Indicators to Improve the Quality of a Center
- 6.2. Assessing Teaching Skills
  - 6.2.1. Assessment Techniques and Tools
  - 6.2.2. Data Collection Techniques and Tools
  - 6.2.3. Teacher Assessment Performance Templates
  - 6.2.4. Purpose and Consequences of Teacher Assessment
  - 6.2.5. Parties Involved in Teacher Assessment
- 6.3. Teacher Self-Assessment
  - 6.3.1. Elements of Self-Assessment
  - 6.3.2. Assessing Educational Practices
  - 6.3.3. Comparison between Different Teaching Styles
  - 6.3.4. The Professor as an Active Agent in Assessment
  - 6.3.5. Self-Assessment and Reflecting on Improving Teaching Skills
- 6.4. The Development of General Teaching Skills
  - 6.4.1. Analysis of General Teaching Skills
  - 6.4.2. Elements of General Teaching Skills
  - 6.4.3. Relevance of General Competencies
  - 6.4.4. Evolution of General Teaching Skills

- 6.5. The Development of Transversal Teaching Skills
  - 6.5.1. Analysis of Transversal Teaching Skills
  - 6.5.2. Elements of Transversal Teaching Skills
  - 6.5.3. Relevance of Transversal Skills
  - 6.5.4. Evolution of Transversal Teaching Skills
- 6.6. The role of Management in the Development of Skills
  - 6.6.1. Management as an Agent in Development
  - 6.6.2. Professional Skills in Academic Management
  - 6.6.3. Differentiation of Basic Management Styles
- 6.7. Future Perspectives of Teaching Skills
  - 6.7.1. Evolution of Teaching Skills in Higher Education
  - 6.7.2. New Teaching Skills for Professors
  - 6.7.3. New Pedagogical Skills for Professors
- 6.8. Digital Skills in Teaching
  - 6.8.1. Key Competences and Digital Competences
    - 6.8.1.1. The Digital Competence Framework for Educators
    - 6.8.1.2. Definition of Digital Competence
    - 6.8.1.3. Areas and Competences
    - 6.8.1.4. Digital Competence Portfolio for Professors
  - 6.8.2. Digital Resources and Learning Processes
    - 6.8.2.1. Digital Resources for Use in the Classroom
    - 6.8.2.2. Digital Resources in Elementary School Education
    - 6.8.2.3. Digital Resources in Middle/High School Education
    - 6.8.2.4. Digital Resources in Higher Education
    - 6.8.2.5. Open Digital Resources
  - 6.8.3. Technological Tools in the Educational Field
    - 6.8.3.1. ICT in Education
    - 6.8.3.2. Contribution of ICT to Education
    - 6.8.3.3. Characteristics of ICT Tools
    - 6.8.3.4. Types of ICT Tools in Education
    - 6.8.3.5. Gamification in the Classroom

- 6.8.4. Transversal and Curricular Resources
  - 6.8.4.1. Digital Competency in Elementary School Education
  - 6.8.4.2. Digital Competency in Middle/High School Education
  - 6.8.4.3. Curricular Integration of ICT
  - 6.8.4.4. Classroom Planning
  - 6.8.4.5. Assessing ICT Use in the Classroom

## Module 7. Competency-Based Learning in Higher Education

- 7.1. Learning Theories
  - 7.1.1. Concept of Learning
  - 7.1.2. Concepts Related to Teaching
    - 7.1.2.1. Educate
    - 7.1.2.2. Teach
    - 7.1.2.3. Instruct
  - 7.1.3. The Relationship Between Learning and Teaching
  - 7.1.4. Evolution of Learning from Childhood to the World of University
  - 7.1.5. Different Educational Institutions
- 7.2. The Sum of Learning: Learning by Competencies
  - 7.2.1. Learning Paths
    - 7.2.1.1. 10 Types of Learning
      - 7.2.1.1.1. Implicit and Explicit Learning
      - 7.2.1.1.2. Explicit Learning
      - 7.2.1.1.3. Associative Learning
      - 7.2.1.1.4. Rote Learning
      - 7.2.1.1.5. Experience-Based / Situated Learning
      - 7.2.1.1.6. Learning by Observation
      - 7.2.1.1.7. Cooperative Learning
      - 7.2.1.1.8. Cooperative Learning
      - 7.2.1.1.9. Significant Learning
      - 7.2.1.1.10. Skill-Based Learning

- 7.3. Competences Related to Self-Learning
    - 7.3.1. Basic Skills
    - 7.3.2. Concept of Self-Learning
    - 7.3.3. Contextualization of Learning
    - 7.3.4. Self-Regulated Learning
    - 7.3.5. Autonomous Learning
  - 7.4. Skill Based Learning in Different Educational Levels
    - 7.4.1. Kindergarten Skills
    - 7.4.2. Elementary School Skills
    - 7.4.3. Middle/High School Skills
    - 7.4.4. Skills for within the University Environment
  - 7.5. Skill-Based Learning in Higher Education
    - 7.5.1. Characteristics of the University Student Body
    - 7.5.2. Characteristics of the University Teaching Staff
    - 7.5.3. Skills from the Syllabus
    - 7.5.4. Prerequisites for Skill Based Learning at University
    - 7.5.5. Skills and the Different University Specialties
  - 7.6. Transversality of Skills
    - 7.6.1. Resources Management
    - 7.6.2. Interpersonal Relations Management
    - 7.6.3. Information Management
    - 7.6.4. Evolution and Refreshing Knowledge in the Face of Change
    - 7.6.5. Technological Domain
  - 7.7. Implementation of Skills from the Curriculum
    - 7.7.1. Levels of Curricular Specification
    - 7.7.2. Competencies from the Educational Administration
    - 7.7.3. Adequacy of Teaching and Curriculum Design
    - 7.7.4. Skills in Students with Functional Diversity
  - 7.8. Competency Assessments
    - 7.8.1. What and How to Assess Now?
    - 7.8.2. Qualification Criteria
    - 7.8.3. Assessing “Know How”, “Know How to Be” and “Know How to Do”
    - 7.8.4. Objective and Subjective Assessment
    - 7.8.5. Interaction Between Skills
  - 7.9. Skills of a University Professor
    - 7.9.1. Profiles of the University Teaching Staff
    - 7.9.2. Planning the Teaching- Learning Process
    - 7.9.3. Presenting Content to the Students
    - 7.9.4. Ability to Integrate Resources Outside University
    - 7.9.5. Suitability of the Teaching Practice to Meet the Demands of the Environment
  - 7.10. Didactic Strategies for Skills Development at University
    - 7.10.1. The Field of Communication and Expression
    - 7.10.2. Relationship Between Skill and Subject
    - 7.10.3. Time Management
    - 7.10.4. Group Work and Projects
    - 7.10.5. Information Processing and Digital Technology in the University Environment
- Module 8. Thesis Direction, Scientific Research, and Guidance in Higher Education**
- 8.1. Motivating University Students to Get Involved in Research
    - 8.1.1. Introduction to Investigative Practice
    - 8.1.2. Gnoseology or Theory of Knowledge
    - 8.1.3. Scientific Research and its Foundations
    - 8.1.4. Research-Oriented Motivation
  - 8.2. Basic Student Training for Research Activity
    - 8.2.1. Initiation in Research Methods and Techniques
    - 8.2.2. Elaboration of Quotes and Bibliographic References
    - 8.2.3. The Use of New Technologies in Information Searching and Management
    - 8.2.4. The Research Report: Structure, Characteristics and Preparation Standards

- 8.3. Requirements for the Management of Research Projects
  - 8.3.1. Initial Guidance for Research Practice
  - 8.3.2. Responsibilities in the Supervision of Theses and Research Projects
  - 8.3.3. Introduction to Scientific Literature
- 8.4. The Approach to the Topic and the Study of the Theoretical Framework
  - 8.4.1. The Research Topic
  - 8.4.2. Objectives of the Research
  - 8.4.3. Document Sources and Research Techniques
  - 8.4.4. Structure and Boundaries of a Theoretical Framework
- 8.5. Research Designs and Hypothesis System
  - 8.5.1. Types of Studies in Research
  - 8.5.2. Research Designs
  - 8.5.3. Hypothesis: Types and Characteristics
  - 8.5.4. Variables in Research
- 8.6. Research Methods, Techniques and Instruments
  - 8.6.1. Population and Sample
  - 8.6.2. Sampling
  - 8.6.3. Methods, Techniques and Instruments
- 8.7. Planning and Supervision of Student Activity
  - 8.7.1. Research Plan Development
  - 8.7.2. Research Activity Document
  - 8.7.3. Schedule of Activities
  - 8.7.4. Supervision and Monitoring of the Students
- 8.8. Supervising Scientific Research Projects
  - 8.8.1. Promoting Research Activity
  - 8.8.2. Encouragement and Creation of Opportunities for Enrichment
  - 8.8.3. Resources and Presentation Techniques



- 8.9. Management of Master's Degree and Doctoral Theses
  - 8.9.1. Management of Theses and Master's Degree Theses as Pedagogical Practice
  - 8.9.2. Support and Career Planning
  - 8.9.3. Characteristics and Structures of Master's Degree Theses
  - 8.9.4. Characteristics and Structures of Doctoral Theses
- 8.10. Commitment to the Dissemination of Results: The True Impact of Scientific Research
  - 8.10.1. The Use of Research as a Tool to Achieve Specific Goals
  - 8.10.2. The Significant Impact of Research Activity
  - 8.10.3. The By-products of Research Projects
  - 8.10.4. Dissemination and Diffusion of Knowledge

## Module 9. Educational Research Methodology

- 9.1. Basic Notions of Investigation: Science and the Scientific Method
  - 9.1.1. Definition of the Scientific Method
  - 9.1.2. Analytical Method
  - 9.1.3. Synthetic Method
  - 9.1.4. Inductive Method
  - 9.1.5. Cartesian Thought
  - 9.1.6. Rules of the Cartesian Method
  - 9.1.7. Methodical Doubt
  - 9.1.8. The First Cartesian Principle
  - 9.1.9. Induction Procedures According to J. Mill Stuart
- 9.2. The General Process of Research: Quantitative and Qualitative Focus
  - 9.2.1. Epistemological Assumptions
  - 9.2.2. Approach to Reality and the Object of Study
  - 9.2.3. Subject-Object Relationship
  - 9.2.4. Objectivity
  - 9.2.5. Methodological Processes
  - 9.2.6. Integration of Methods
- 9.3. Research Paradigms and Methods Derived from These
  - 9.3.1. How do Research Ideas Arise?
  - 9.3.2. What is there to Research in Education?
  - 9.3.3. Research Problem Statement
  - 9.3.4. Background, Justification and Research Objectives
  - 9.3.5. Theoretical Foundation
  - 9.3.6. Hypotheses, Variables and Definition of Operational Concepts
  - 9.3.7. Choosing a Research Design
  - 9.3.8. Sampling in Quantitative and Qualitative Studies
- 9.4. Phases and Stages of Qualitative Research
  - 9.4.1. Phase 1 Conceptual Phase
  - 9.4.2. Phase 2 Planning and Design Phase
  - 9.4.3. Phase 3 Empirical Phase
  - 9.4.4. Phase 4 Analytical Phase
  - 9.4.5. Phase 5 Diffusion Phase
- 9.5. Types of Quantitative Research
  - 9.5.1. Historical Research
  - 9.5.2. Correlation Research
  - 9.5.3. Case Studies
  - 9.5.4. "Ex Post Facto" Research of Completed Events
  - 9.5.5. Quasi-experimental research
  - 9.5.6. Experimental Research
- 9.6. Phases and Stages of Qualitative Research
  - 9.6.1. Phase 1 Preparation Phase
  - 9.6.2. Phase 2 Field Phase
  - 9.6.3. Phase 3 Analytical Phase
  - 9.6.4. Phase 4 Informative Phase

- 9.7. Types of Qualitative Research
  - 9.7.1. Ethnography
  - 9.7.2. Grounded Theory
  - 9.7.3. Phenomenology
  - 9.7.4. The Biographical Method and Life History
  - 9.7.5. The Case Study
  - 9.7.6. Content Analysis
  - 9.7.7. Examining the Discourse
  - 9.7.8. Participatory Action Research
- 9.8. Techniques and Instruments for Collecting Quantitative Data
  - 9.8.1. The Structured Interview
  - 9.8.2. The Structured Questionnaire
  - 9.8.3. Systematic Observation
  - 9.8.4. Attitude Scales
  - 9.8.5. Statistics
  - 9.8.6. Secondary Sources of Information
- 9.9. Techniques and Instruments for Collecting Qualitative Data
  - 9.9.1. Unstructured Interviews
  - 9.9.2. In-Depth Interviews
  - 9.9.3. Focus Groups
  - 9.9.4. Simple, Unregulated and Participant Observation
  - 9.9.5. Life Stories
  - 9.9.6. Diaries
  - 9.9.7. Content Analysis
  - 9.9.8. The Ethnographic Method





- 9.10 Data Quality Control
  - 9.10.1. Requirements for a Measuring Instrument
  - 9.10.2. Processing and Analysis of Quantitative Data
    - 9.10.2.1. Validation of Quantitative Data
    - 9.10.2.2. Statistics for Data Analysis
    - 9.10.2.3. Descriptive Statistics
    - 9.10.2.4. Inferential Statistics
  - 9.10.3. Processing and Analysis of Qualitative Data
    - 9.10.3.1. Reduction and Characterization
    - 9.10.3.2. Clarify, Refine and Compare
    - 9.10.3.3. Programs for Qualitative Analysis of Textual Data

## Module 10. Innovation, Diversity and Equity in Education

- 10.1. What Do We Mean by Educational Innovation?
  - 10.1.1. Definition
  - 10.1.2. Why is Educational Innovation Important?
  - 10.1.3. How Can We Be Innovative?
  - 10.1.4. Should We Be Innovative?
- 10.2. Diversity, Equity and Equal Opportunity
  - 10.2.1. Definition of Concepts
  - 10.2.2. Three Essential Elements in Education
- 10.3. Innovation and Educational Improvement
  - 10.3.1. Innovation Process
  - 10.3.2. Efficiency and Educational Improvement
- 10.4. Innovation for Achieving Equality in Education
  - 10.4.1. How to Explain Equality
  - 10.4.2. Equality in Education: A Persistent Problem
  - 10.4.3. Factors for Achieving Equality in the Classroom: Examples in the Classroom
- 10.5. Non-Sexist Teaching and Language
  - 10.5.1. What is Non-Sexist Language?
  - 10.5.2. What is Sexism in Language?
  - 10.5.3. What is Inclusive Language?
  - 10.5.4. Examples of Sexist and Non-Sexist Language in Education
- 10.6. Factors that Favor and Hinder Innovation
  - 10.6.1. Factors that Favor Innovation
  - 10.6.2. Factors that Hinder Innovation
- 10.7. Characteristics of Innovative Schools
  - 10.7.1. What is an Innovative School?
  - 10.7.2. Innovative Schools, a Different Education
  - 10.7.3. Elements of an Innovative School
  - 10.7.4. The Keys to an Innovative Classroom
- 10.8. Process of Educational Innovation
  - 10.8.1. The 21st Century School
- 10.9. Resources and Innovation Teaching Programs
  - 10.9.1. Distinct Innovation Programs for the Classroom
  - 10.9.2. Teaching Resources for an Innovative Classroom
- 10.10. Emerging Fields in the Teaching
  - 10.10.1. Emerging Pedagogies
  - 10.10.2. Emerging Needs of Students
  - 10.10.3. ICT as an Emerging Resource in Teaching
  - 10.10.4. Different ICT Tools to Use in the Classroom



*This program will be key  
to advance your career”*

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





“

*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

*With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.*



*It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.*

“

*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.*

The effectiveness of the method is justified by four fundamental achievements:

1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.



*Educators will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then adapted in audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, students can watch them as many times as they want.



### Interactive Summaries

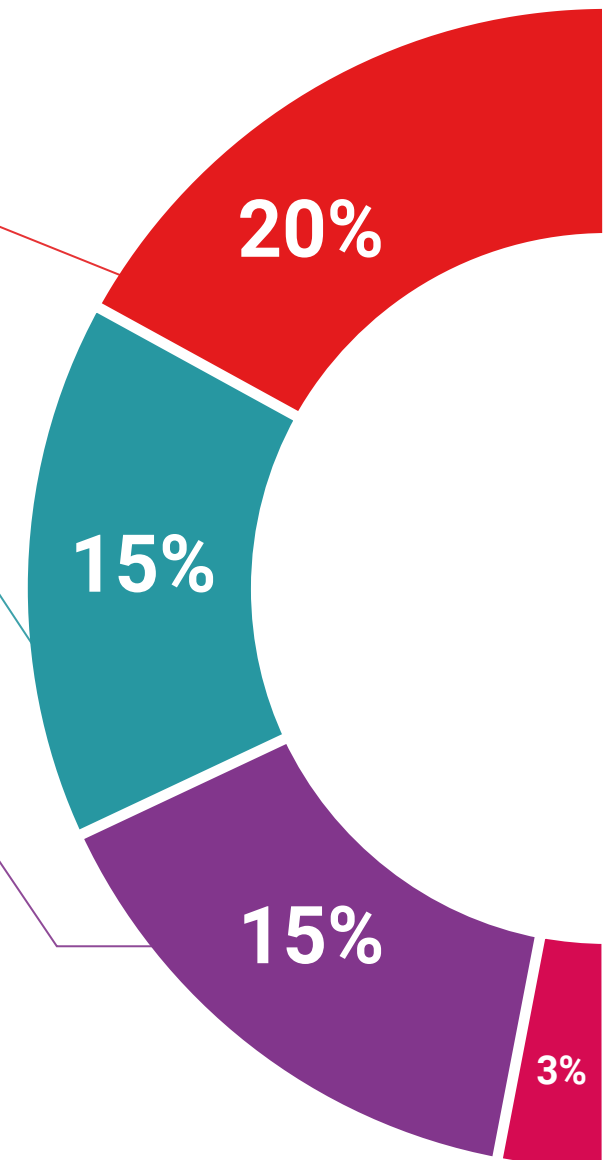
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

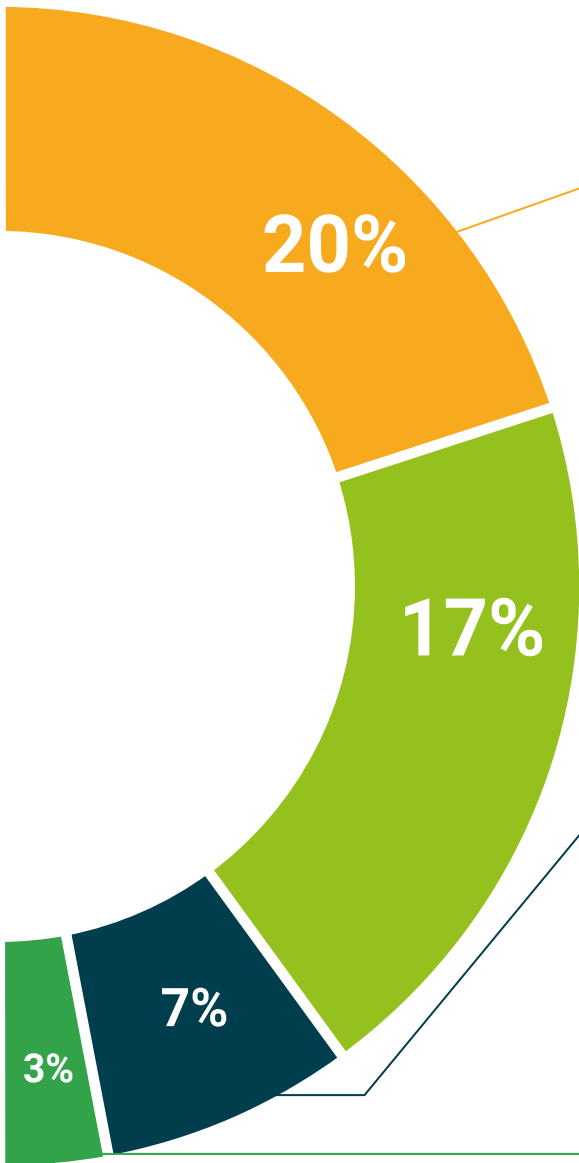


### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.







#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



07

# Certificate

The Professional Master's Degree in University Teaching guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Global University.



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*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This program will allow you to obtain your **Professional Master's Degree diploma in University Teaching** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

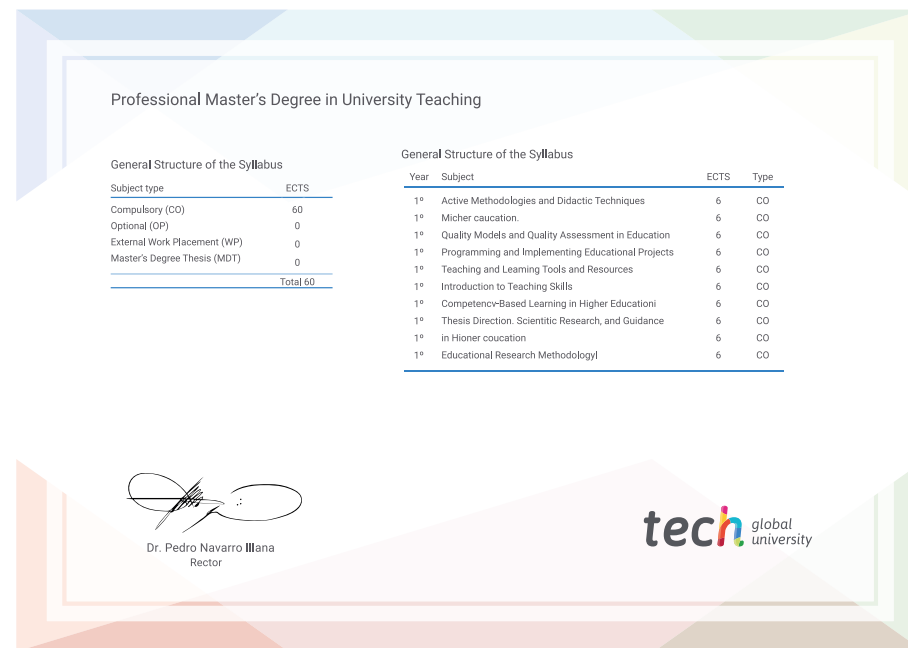
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in University Teaching**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service information

knowledge present quality

development languages

virtual classroom

**tech** global  
university

## Professional Master's Degree University Teaching

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree University Teaching

